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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,998	07/13/2006	Masayoshi Esashi	062782	1367
	7590 09/21/2009 FERMAN, HATTORI, DANIELS & ADRIAN, LLP		EXAMINER	
1250 CONNECTICUT AVENUE, NW SUITE 700			TAMAI, KARL I	
WASHINGTON, DC 20036		ART UNIT	PAPER NUMBER	
			2834	
			NOTIFICATION DATE	DELIVERY MODE
			09/21/2009	ELECTRONIC

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentmail@whda.com

	Application No.	Applicant(s)				
	10/585,998	ESASHI ET AL.				
Office Action Summary	Examiner	Art Unit				
	KARL I.E. TAMAI	2834				
The MAILING DATE of this communication ap Period for Reply	ppears on the cover sheet with the	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
<u> </u>	lune 2009					
<del>'=</del>	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
,—	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
	Expante quayre, 1000 0.21 11, 1	00 0.0.210.				
Disposition of Claims						
4)⊠ Claim(s) <u>1,2 and 4-21</u> is/are pending in the application.						
4a) Of the above claim(s) <u>7-10 and 18-21</u> is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>4-6(4) and 11-17</u> is/are allowed.						
6)⊠ Claim(s) <u>1</u> is/are rejected.						
7)⊠ Claim(s) <u>2 and 6(1)</u> is/are objected to.	7)⊠ Claim(s) <u>2 and 6(1)</u> is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)⊠ The specification is objected to by the Examin	er.					
10)⊠ The drawing(s) filed on <u>13 July 2006</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a lis	et of the certified copies not receive					
) ☑ Notice of References Cited (PTO-892)       4) ☐ Interview Summary (PTO-413)         ) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)       Paper No(s)/Mail Date         ) ☑ Information Disclosure Statement(s) (PTO/SB/08)       5) ☐ Notice of Informal Patent Application         Paper No(s)/Mail Date 7/06, 11/06.       6) ☐ Other:						

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#### **DETAILED ACTION**

## Specification

- 1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
- 2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The examiner suggests "Driving Mechanism Using Shape Memory Allows including a Magnetic Latch".

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Esashi et al. (Esashi)(JP 2001-265213). Esashi teaches a device having a first and a second shape memory alloy coils 132, 134 physically connected mutually in series in the axial direction of the pin drive member 111 and a fixing member 152, 154 is provided on one common substrate 150. Esashi teaches a magnetic latch 164 to hold the drive member 111 and a drive circuit 250, 200 to supply electricity to the first and the second shape

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memory alloy coils 132, 134, where the magnetic latch is made of a magnet plate 185 and a plurality of magnetic bodies 126, 128 provided to the drive member 111, such that the drive member is connected to the first and the second shape memory alloys coils and extending in the axis direction of the pin 111, where the first and the second shape memory alloy coils 132, 134 are selectively 250 heated by electrical driving by the drive circuit 200, such that the drive member 111 is moved in the axis direction by compressing or extending of the heated first or the second shape memory alloy coils 132, 134, and the drive member is fixed and held in the axis direction by magnetically fixed to the magnetic latch at 126/185 or 128/185.

### Allowable Subject Matter

- 5. Claims 4, 5, 6(4) and 11-17 are allowed.
- 6. Claims 2 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl I.E. Tamai whose telephone number is (571) 272 2036.

The examiner can be normally contacted on Monday through Friday from 8:00 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the

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examiner's supervisor, Mrs. Quyen Leung, can be reached at (571) 272 - 8188. The facsimile number for the Group is (571) 273 - 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Karl I Tamai/ PRIMARY PATENT EXAMINER September 17, 2009